Golden Dozer

User Manual

Check the horizontal level before you set up.

If not, it cause balls are jammed frequently.

IR ROBOT Intelligent & Recreational

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1. Notifications

1-1. Basic directions for safe use

1) It must be avoid wet, dusty, or breakable place when you move or keep it long term.
(It can be damageable to keep it in too dry or moisture.)

2) Do not uninstall, fix, or tune.

3) Avoid a direct ray of light and heater.

4) Our game has a patent that the robot being recharged continuously. The ground a robot can move is supplied electric. Do not put a wet hand or materials (especially conductors) on the ground when the power is on. (It causes an electric shock. A short can damage a machine or cause a fire.)

5) Turn off when you clean the machine. Do not use water or chemicals directly. Please use wet towel then dry up.

1-2. Directions for installing and operation

1) Install and operate after fully understand user manual.

2) Try to move and install a machine without shock.

3) Check the level before install it, then fix it with stoppers. (Balls can be jammed without checking level)

4) Use rated voltage and grounded outlet.

5) Do not put a wet hand or conductors on the playing ground (Robot's moving zone). Conductors cause short and fire. Remove them quickly with gloved hand.
It disconnects electric automatically when a conductor place on the ground, but the attention is always needed. It connects electric automatically when a conductor displace from the ground.

6) Clean and check regularly so that prevents electric parts from damage with dust.

7) Clean the playing ground regularly to operate smoothly. (at least monthly)
Especially, clean frequently in dusty condition. (weekly) If you use wet towel or chemical cleaner, turn off before clean then turn on after dry up.

1-3. Directions for robot handling

1) Check the switch is "ON" under the robot when the machine is installed.
(Check the switch is "ON" when you operate it because the default setting is "OFF")

2) The Robot battery might be discharged when a robot is moving slowly or LED is blinking.
Put the robot on the playing ground with power on, a machine and a robot, for 30 minutes to recharge it.
Don't play game for a while.

3) It is a precision material. Watch out the shock.

4) When it has a long term rest (more then a day). It needs warming up to proper working. Switch the robot on for tens of minutes on the play ground then play game.

2. Product summary.

2-1. Features

This game is the player control the robot moves balls into goals to make a high score on the voltage supplying system panel with a patent that supply electricity to wireless robot on it.

- It provide educational effects + Enjoyable effect with game
- To make new robot game culture to children and teenagers.

2-2. Components.

Please check first when you open it.

All components are in the coin box

1) Main Body

2) Robot : 1ea

3) Power supplying pin : 6ea (consumable)

4) ball : 70ea

6) Power Cable : 1ea

7) Key 3 kinds (Case Cover Key, Coin box key, Coin door key)

8) Manual : 1ea

2-3. Default configuration

1) Credit : 1 pound ➔ 1 Game

2) Game level : 6level

3) Ticket : Fail (1), First (3), Silver (5), Gold (10)

3) Time : 60sec

※ Refer to the page 12 " Main Board Configuration"

3. Installation.

3-1. Location.

1) Find stable and flat place. Avoid moisture place.

2) Avoid a direct light, heat, and the place changes humidity and temperature dramatically.

3) All machines must use proper power outlet.

4) Please check total amperage when you use an extension line.

3-2. Setup.

1) Fix and level.

- Fix the machine with stoppers under the machine.

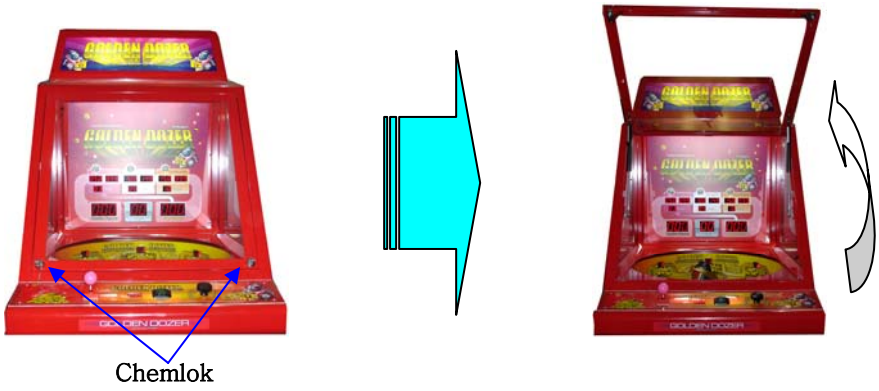
- Check the horizontal level during fixing with stoppers.

※ Notice : Balls can be jammed without checking the horizontal level (refer to page 17)

2) Setting robot and balls.

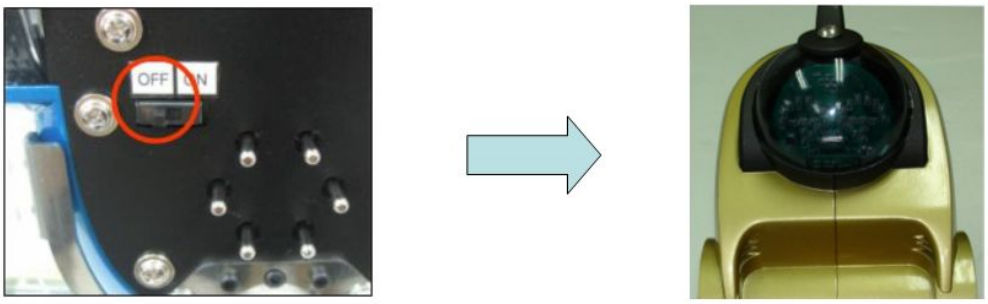
- Open the front glass door.

  Open the chemlok located on the bottom of glass door and pull.



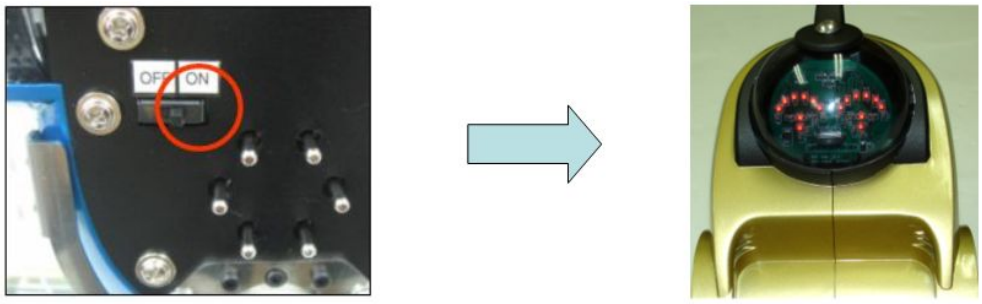
- Put 70 balls on the ground.
- Turn on the switch of the robot then put in.

※ The switch is located on the bottom side of the robot.



< When the Switch is OFF >

< Expression LED is blinking>



< When the switch is on >

< Expression LED is on >

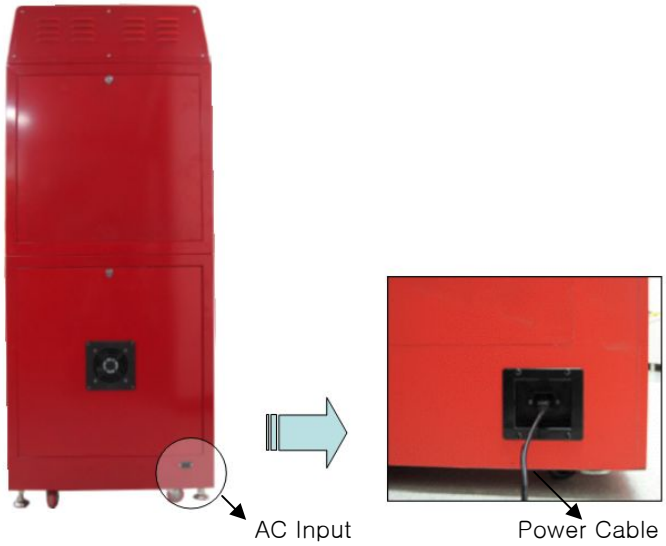
- Close the front glass door.

  Close the chemlok located on the bottom of glass door.

3) Connect a main power cable

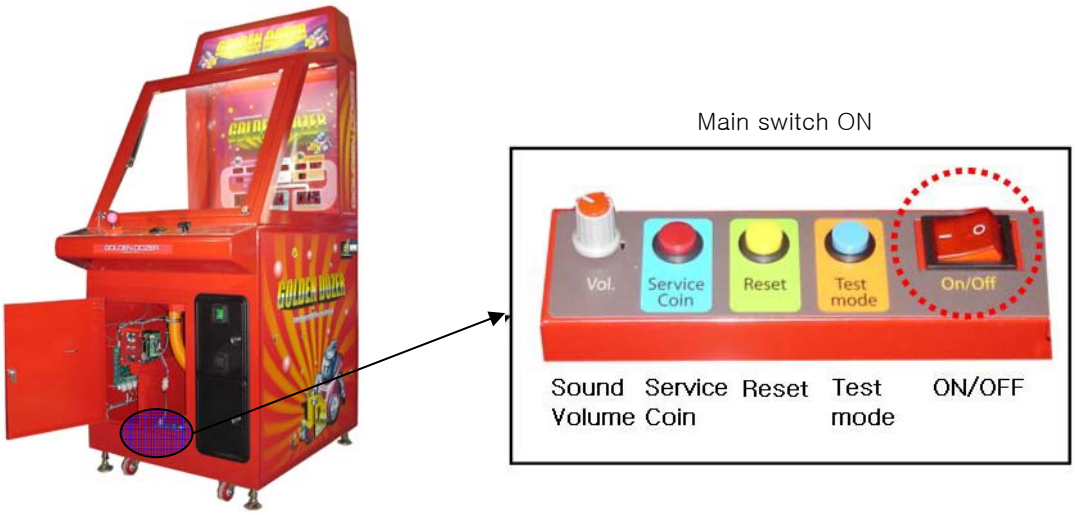
- Connect a main power cable AC input on the backside with an outlet.

※ Check the rated power(according to country) matches up to be set power before connection.



4) Turn on the main switch

- Open the front door and turn on the switch located in control panel.



< Control panel >

5) Check the proper working

- Insert coin and play game to work properly.

4. How to play

1) Insert coin or bill.

2) Push the start button.

Need to set First, Silver, Gold bonus rate (refer to page 12 Mainboard configuration)

It will be shown “Time” and “Double Chance” when started.

< First Bonus Silver Bonus Gold Bonus >

< Double Chance Time Your Point >

When “your point” matches up to “Double Chance” for a second, the player gets double score as twice as he has gotten.

3) Move the robot with the joystick and steering.

Joystick	Coin FND	Start Button	Steering
Move Forward and backward	Show remaining credit	Start the game	Left and right turn

4) Control the robot let balls into the goal.

Each Goal has own score (FND on the goal shows). The score is laying aside each score whenever balls come into the goal. Your point shows how many score you get.

When “your point” matches up to “Double Chance” for a second, the player gets double score as twice as he has gotten.

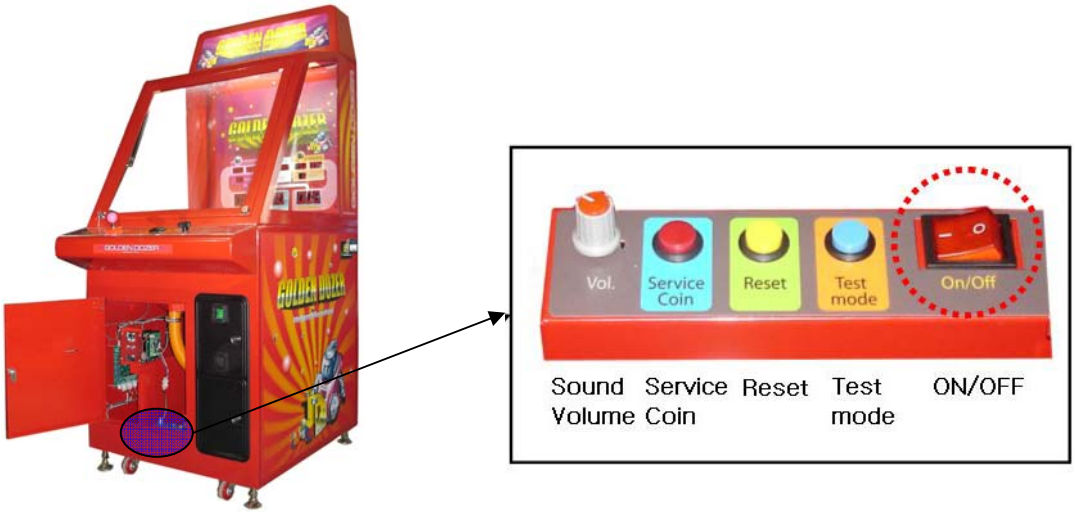
5) The game is finished when the time is up.

Tickets will be dispensed according to “your point”. (refer to page 12, 5-3).

5. Configuration

5-1. Control panel

You can find control panel when you open the front door as following picture.



(1) Sound Volume : Turn right → Volume up , Turn left → Volume down.

(2) Service Coin : you can play without coin if you push the button.

The credit increase as many as you push the button.

(3) Reset : The credit go back to “0”.

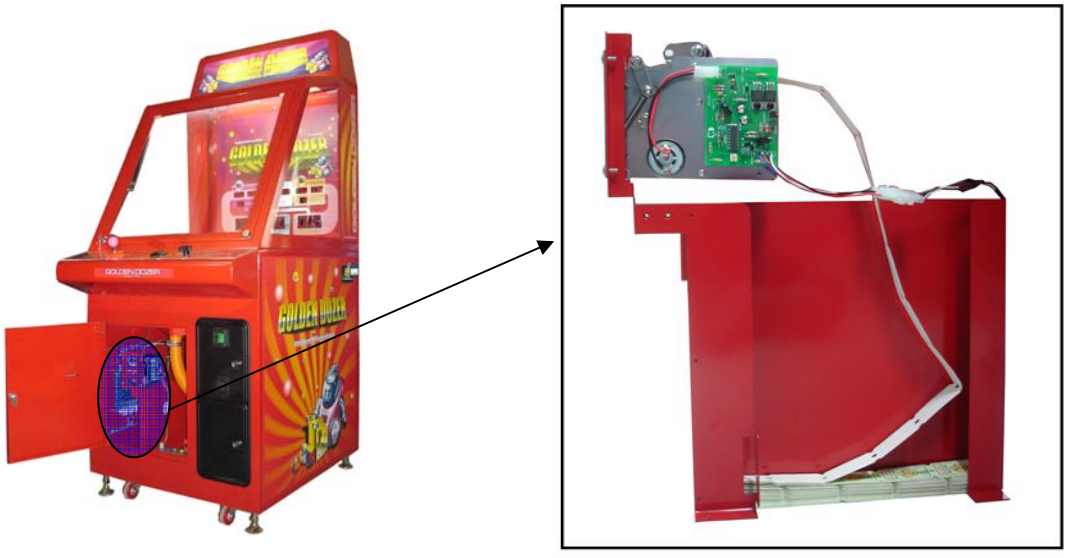
To save configuration

(4) Test mode : To test a fan.

(5) ON/OFF : Main power switch

5-2. Ticket dispenser.

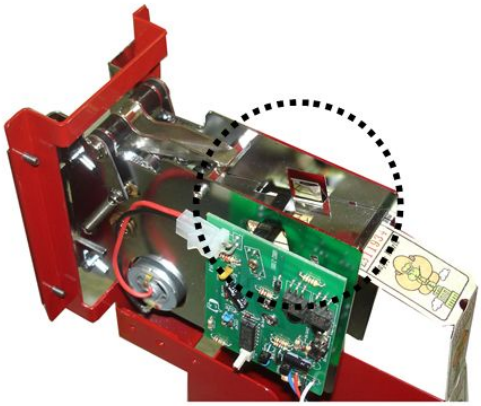
You can find a ticket dispenser when you open the front door as following pictures.



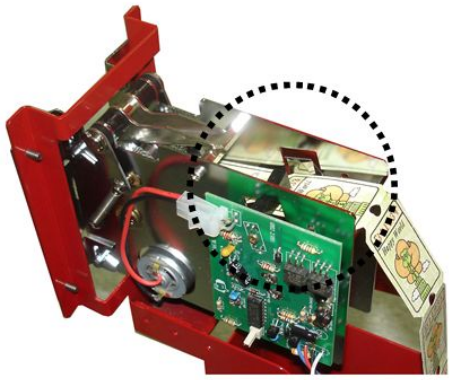
1) Put tickets in the dispenser as following picture.

Left picture shows right way to put in.

Right picture shows wrong way to put in.



< O >



< X >

2) It works when you push the DIP located on left side switch then it dispense tickets.

Control the ticket's place with the DIP switch.

5-3. Main board configuration

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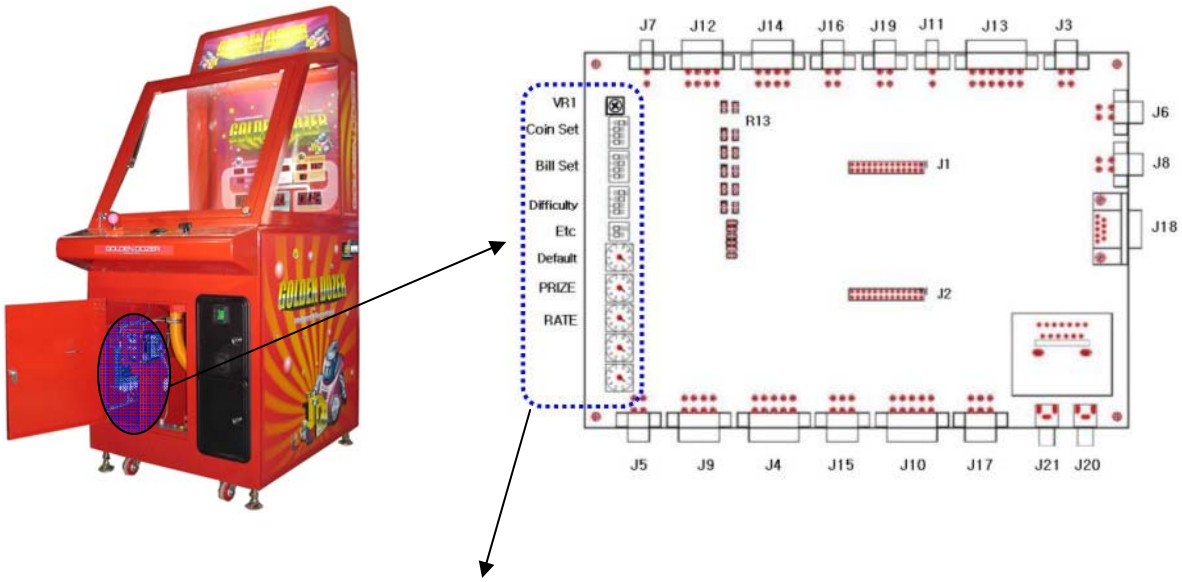
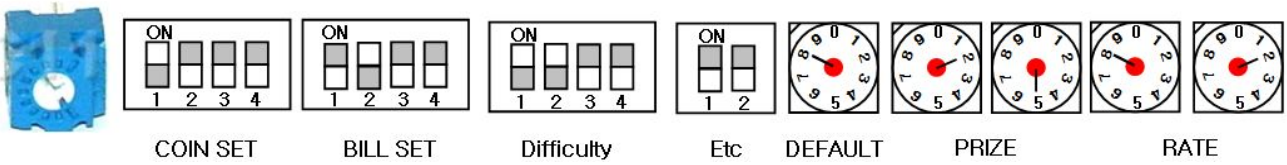
You can find a main board on the left side of inner case.

It controls coin, difficulty, ticket's amount as following picture.

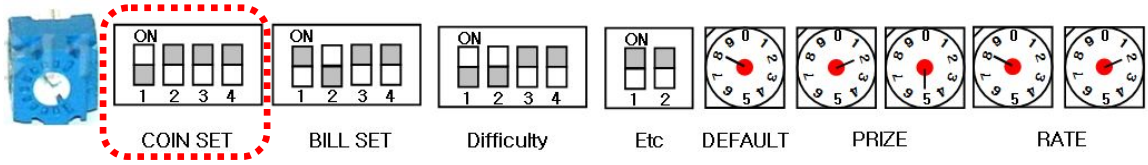




COIN SET	Set the coin frequency with DIP switch
BILL SET	Set the game level.
DIFFICULTY	It's not adopted.
Etc	It control demo music and demo moving when it is not played
Default	Set the ticket amount when player is fail the game.
Prize(left)	Set the ticket amount when a player makes first bonus level.
Prize(right)	Set the ticket amount when player make second bonus level (Silver Bonus).
Rate(left)	Set the ticket amount when player make third bonus level (Gold Bonus).
Rate(right)	Set the playing Time.

1) COIN SET

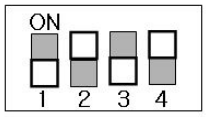
Set the coin frequency with DIP switch.



In case of UK

1 pound coin makes 10 signs.

If you set the DIP switch as following picture, 1 credit need 10 signs.



10 Pence * 10 coins ➔ 1 credit

20 Pence * 5 coins ➔ 1 credit

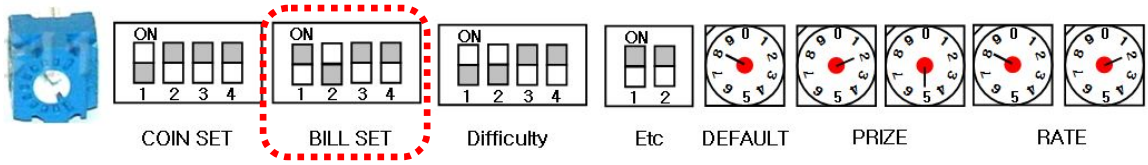
50 Pence * 2 coins ➔ 1 credit

1 Pound * 1 coin ➔ 1 credit

2) BILL SET

Set the game level.

It set the First, Silver, Golden Bonus score rate.



Level	First Bonus	Silver Bonus	Gold Bonus	Dip Switch (White means switch)
1	50-99	100-249	250-	ON OFF
2	50-149	150-399	400-	ON OFF
3	50-199	200-549	550-	ON OFF
4	75-149	150-349	350-	ON OFF
5	75-199	200-499	500-	ON OFF
6	75-249	250-649	650-	ON OFF
7	100-199	200-449	450-	ON OFF
8	100-249	250-599	600-	ON OFF
9	100-299	300-749	750-	ON OFF
10	150-299	300-649	650-	ON OFF

11	150-349	350-799	800-	ON OFF
12	150-399	400-949	950-	ON OFF
13	200-399	400-849	850-	ON OFF
14	50-199	200-998	999-	ON OFF
15	100-299	300-998	999-	ON OFF
16	150-499	500-998	999-	ON OFF

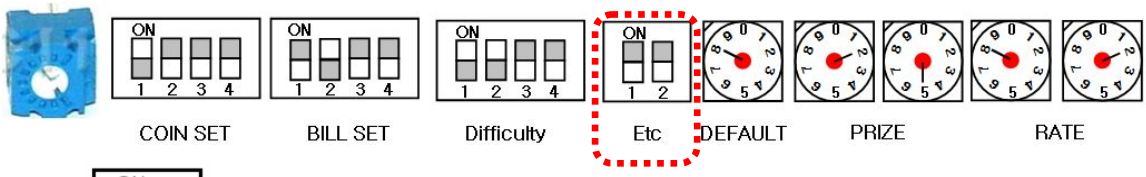
- **Difficulty**

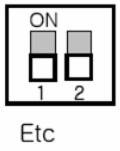
  It's not adopted.

3) ETC

It control demo music and demo moving when it is not played for 30 seconds.

When you use this functions, robot moves with music for 2 sec when it's not played.





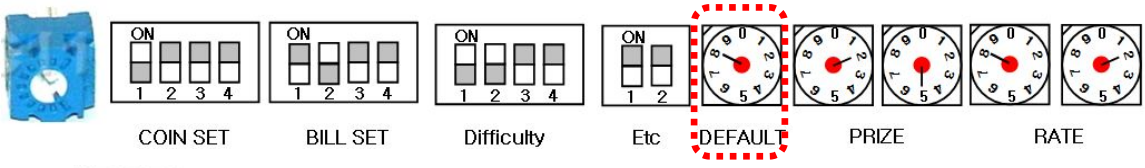
ETC 1 : Demo music (on, off)

ETC 2 : Demo moving (on, off)

4) DEFAULT

Set the ticket amount when player is fail the game.

You can set form 0 to 9 (natural number).



No. 0 : Fail → Ticket : 0

No. 1 : Fail → Ticket : 1

No. 3 : Fail → Ticket : 3

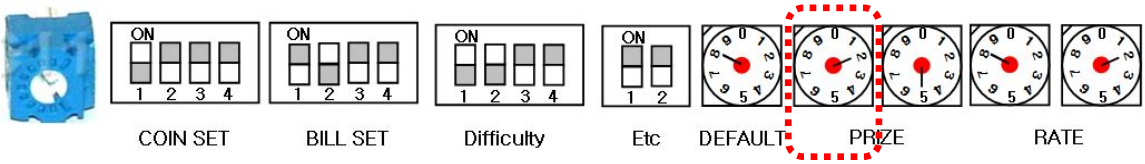
DEFAULT

No. 8 : Fail → Ticket : 8

5) PRIZE (Left)

Set the ticket amount when a player makes first bonus level (First Bonus).

You can set from 0 to 9 (Multiply 3)



DEFAULT

No. 0 : First Bonus → 0 ticket (0*3)

DEFAULT

No. 1 : First Bonus → 3 ticket (1*3)

DEFAULT

No. 3 : First Bonus → 9 ticket (3*3)

DEFAULT

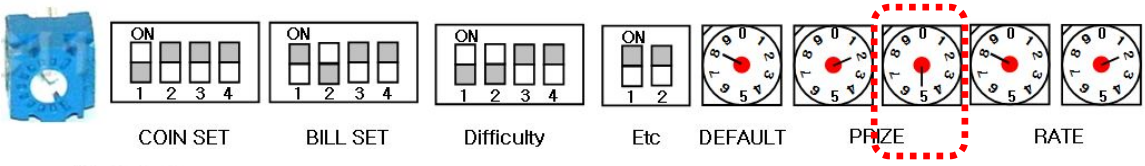
No. 8 : First Bonus → 24 ticket (8*3)

It's possible to set ticket amount from 0 to 27. (Multiple of 3)

PRIZE (Right)

Set the ticket amount when player make second bonus level (Silver Bonus).

You can set from 0 to 9 (Multiply 5)



DEFAULT

No. 0 : First Bonus → 0 ticket (0*5)

DEFAULT

No. 1 : First Bonus → 5 ticket (1*5)

DEFAULT

No. 3 : First Bonus → 15 ticket (3*5)

DEFAULT

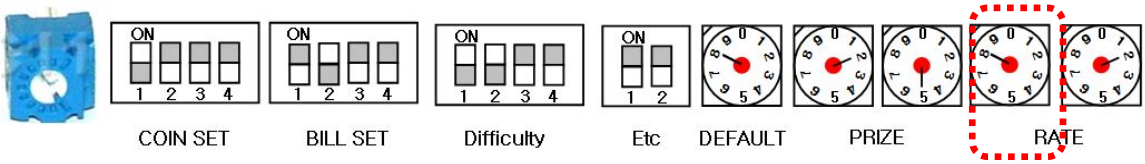
No. 8 : First Bonus → 40 ticket (8*5)

It's possible to set ticket amount from 0 to 45. (Multiple of 5)

6) RATE (Left)

Set the ticket amount when player make third bonus level (Gold Bonus).

You can set from 0 to 9 (Multiply 10)



DEFAULT

No. 0 : First Bonus → 0 ticket (0*10)

DEFAULT

No. 1 : First Bonus → 10 ticket (1*10)

DEFAULT

No. 3 : First Bonus → 30 ticket (3*10)

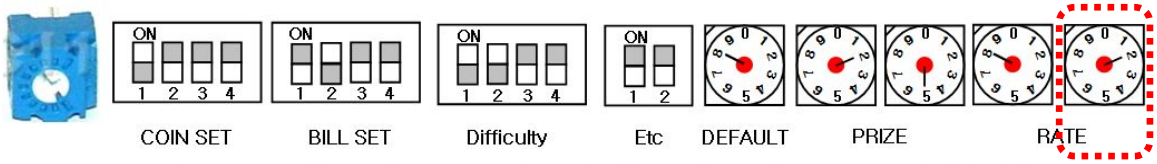
DEFAULT

No. 8 : First Bonus → 80 ticket (8*10)

It's possible to set ticket amount from 0 to 100. (Multiple of 10)

RATE (Right)

Set the playing Time.

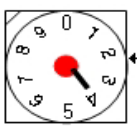


Time=60sec

Time=45sec

Time=50sec

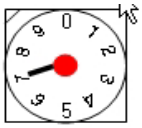
Time=55sec



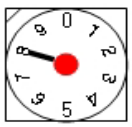
Time=65sec

Time=70sec

Time=75sec



Time=80sec



Time=85sec

Time=90sec

6. Maintenance & First Aid

6-1. Replace and clean tires.

The tires are consumables because of material. Check and clean regularly so that it lasts longer.

There is problem with it, replace it immediately.

1) Clean tires.

If you clean tires with wet towel regularly, the robot moves smoothly.

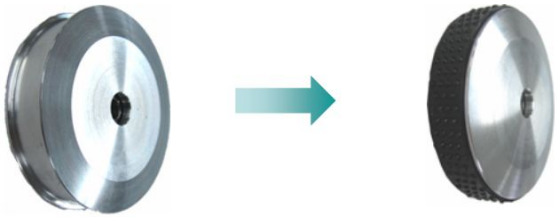
When you clean with wet towel, it has to be dried up.

The water can cause short and problems.

2) Replace tires

(1) Disentangle the wheel with a phillips head screwdriver.

(2) Remove the damaged tire on the wheel and set new tire



6-2. Replace power supplying Pins

The power supplying pins are for supplying the power from the power supplying board to the robot.

If the tip of pin is worn out, it needs to change with new one.(about three months period)

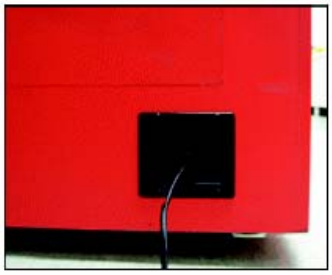
There are 6 extra pins in the package for replacing.

It is easy to take out pin by pulling it and push the pin until the gold color part is not showing when replacing it.

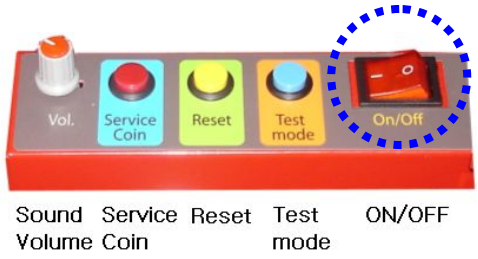
6-3. ETC

1) When power has gone.

(1) Check the main power cable on the back side.



(2) Check the power switch on the control panel.



2) The robot doesn't work

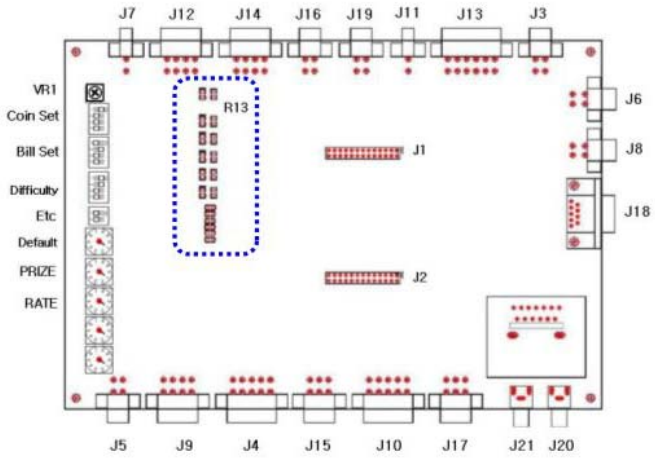
(1) Check the main power as above no. 1)

(2) Check the switch in on located on the bottom side of the robot. (refer to page6)

(3) Check the expression LED. If it's blinking or out, the battery is discharged. Put the robot on the playing ground for 30 min to charge. If it's not work after charge, please call to service.

(4) Check the IR located on the wall of playing ground is blinking when player control the joystick to move the robot. If the IR is not blinking although every power is on, call to service.

(5) If it's still not working after checking 1 to 4, check the main board. The R13 on the main board has to be blinking when control the joystick. If it's' not blinking although every power is on, it might be main board problem. Call to service.



3) Balls are not circulated.

(1) Check the power first. (refer to 6-3, no.1)

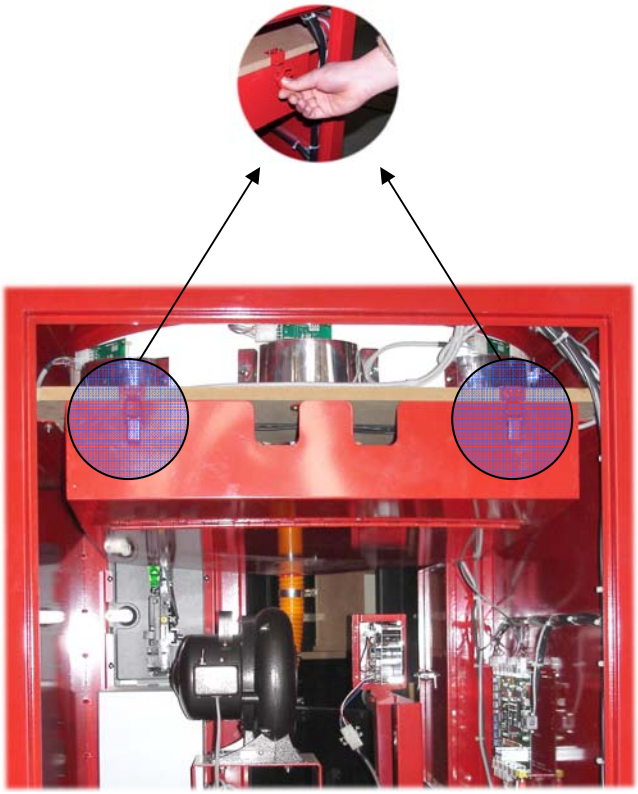
(2) Check the fan. Push the test button on the control panel.
If it's not working, check the power of fan beside it.

<Power of fan>

(3) Check the jam of balls to open back side door after opening the back door and ball gather.
If you stir the jammed balls with stick, balls moves into the playing ground again by pan.

★ How to open the ball gather.

① Open the back side door then you can find ball gather.
When you look at the both side of the balls gather, you can find latches.
When you pull up it, it is unlatched.

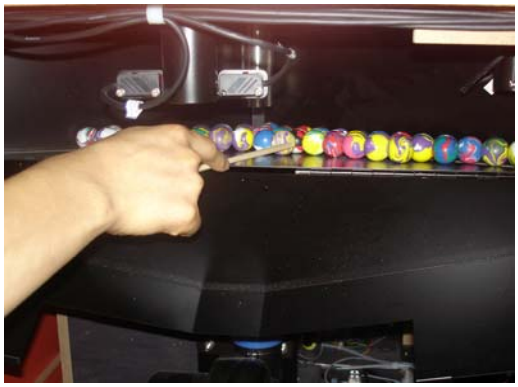


② The ball gather is opened when you unlatch each side latches, then you can find balls inside.

③ If balls are jammed, stir balls with long stick to unblock.

Turn on the fan when you stir (playing game or push the test button)

You can see Balls come up to the ground if you do properly.



④ Do it in reverse order when you close the ball gather.

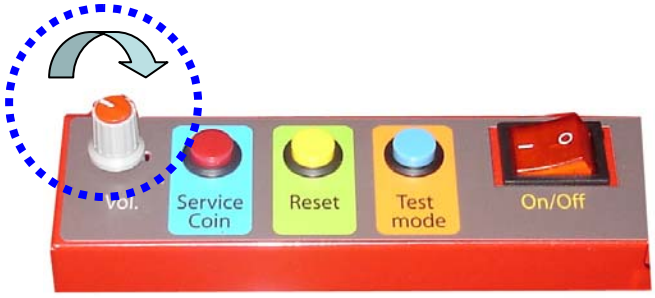
➔ If balls are jammed frequently, check the horizontal level.

To decline toward front side helps to be jammed.

4) Sound doesn't work.

Adjust volume on the control panel.

(Turn right → Volume up, Turn left → Volume Down)



7. Specification

1) Dimension : 720 X 980 X 1780 (W x D x H)mm

2) Weight : 160kg

3) Rated voltage : AC 220V, 50/60Hz

8. Q & A

1. The main power is gone. (Refer to page 16)
   ➔ Check the power cable.
   ➔ Check the power switch on the control board.

2. The power is off when it's playing.
   ➔ Check the main power. (Refer to above no.1)
   ➔ Check the play ground that lay a conductor. It is turned off automatically in this case to avoid short.
   Remove a conductor from the playing ground. (Refer to page no.3 1-2)

3. The robot is not working.
   ➔ Check the main power. (Refer to above no.1)
   ➔ Check the switch is on locate on the bottom side of the robot
   (refer to page 6, page 16)

4. The background music doesn't working.
   ➔ Check the volume on the control panel. (refer to page 19)
   ➔ Check the cable is connected with speaker.

5. Balls don't come up to the playing ground.
   ➔ Check balls were jammed that open the backside door.
   Unblock the jammed balls with stick (refer to page 18)
   ※Notice : Use a ball that we supplied only. The others can cause many problems.